

10/088522

JCIS Rec'd PCT/PTO 29 MAR 2002

THE FOLLOWING IS THE ENGLISH TRANSLATION OF THE
ANNEXES TO THE INTERNATIONAL PRELIMINARY
EXAMINATION REPORT : AMENDED SHEETS (Pages 30 and 32).

CLAIMS

1. Characterisation process for a nitrogenous base, a nucleic acid, or a nitrogenous base of a nucleic acid, fixed on a support, the said process consisting of characterising the said nucleic acid or
5 the said nitrogenous base by a mirage effect method.

2. Quantification process for a nitrogenous base, a nucleic acid, or a nitrogenous base of a nucleic acid, fixed on a support, the said process
10 consisting of quantifying the said nucleic acid or the said nitrogenous base by a mirage effect method.

3. Mapping process for nitrogenous bases, nucleic acids, or nitrogenous bases of nucleic acids,
15 fixed on a support, the said process consisting of mapping the said nucleic acids or the said nitrogenous bases by a mirage effect method.

4. Process for manufacturing a nucleic acid
20 biochip formed particularly of a support on which at least one nucleic acid synthesised in situ is fixed, the said process comprising at least one synthesis and analysis cycle, particularly including firstly coupling of a nitrogenous base for in situ synthesis of the said
25 nucleic acid fixed on the support, and secondly an analysis intended to check the coupling of the said nitrogenous base, the said analysis being done using a characterisation process according to claim 1,

11. Process according to claim 7, in which the pump beam is chosen among an argon laser with a wave length of 275 nm, or a solid laser with a wave length of 266 nm.

5

12. Process according to claim 6, in which the excitation source is an incoherent source.

13. Process according to any one of claims 1
10 to 4, in which the characterisation, quantification, mapping or analysis is done in polarisation of the nucleic acid(s) present on the support.

14. Device for implementation of a process
15 according to claim 5, the said device comprising the following elements:

- a means of positioning the sample comprising a support on which the nucleic acids are fixed,
- a means of illuminating the sample,
- 20 - a means of detecting and / or measuring the absorption, deviation or reflection of light by the sample when it is illuminated by the said illumination means, and
- a means of positioning the said illumination
25 means and the said detection and / or measurement means.